

SOME NEW LEAFHOPPERS OF THE
GENUS ALIGIA

(Rhynchota: Homoptera)

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The members of this genus are nearly all western and especially southwestern in distribution. They all possess the two cross nervures, numerous reticulations and a concave suture between the ocelli apparently bounding the front. Van Duzee recently described three species from California, and this paper adds five forms from Arizona. The North American species may be roughly divided into groups as follows:

- A—Elytra, and general color, pale or milky with fuscous or dark brown nervures.
- B—Vertex angulate disk nearly flat.....
inscripta Van D., *californica* Van D., *colei* Van D., and
descripta Ball
- BB—Vertex rounding disk convex
jucunda Uhl., *munda* Ball, *oculea* Ball, and *dellana* Ball
- AA—Elytra, and general color, tawny or golden, the nervures concolorous or darkening posteriorly.
- C—Ground color of basal half of elytra pale or subhyaline. Transverse bands pale or wanting.....
modesta O. and B., *occidentalis* Van D., and *manitou* Ball
- CC—Ground color of basal half of elytra tawny to dark testaceous nervures obscure. Bands usually definite, ivory
turbinata Ball, *chiricana* Ball, and *santana* Ball

***Aligia descripta* Ball, n. sp.**

Resembling *inscripta*, but longer, darker with a shorter and transversely furrowed vertex. Length, 5 mm.

Vertex shorter and narrower than in *inscripta* with an obtusely rounding apex and a deep transverse furrow, longer and narrower than in *jucunda* which it otherwise resembles. Front broader above than in *jucunda*, definitely convex in both diameters instead of being concave beneath the produced apex of vertex as in *inscripta*. Elytra longer and narrower than in *inscripta*. Venation similar in pattern, much more heavily inscribed than in *jucunda*. The inscriptions along costa numerous and fairly regular.

Color: Vertex creamy, with a pair of round dots at apex, a transverse band widening in the middle and the median line connecting this band with a basal triangle fuscous, a pair of brown dashes against the eyes and a spot on the disk on either side brown. Pronotum heavily inscribed with fuscous. Scutellum creamy, a pair of large brown spots at the base, a median line and a pair of lateral

dark spots on the apical triangle. Elytra ivory, the veins and numerous vermiculate lines fuscous, two pale transverse bands indicated.

Holotype, female¹ and allotype, male, Glenn Oaks, Arizona, July 19, 1929, and five pairs of paratypes from Glenn Oaks, Granite Dells and Yarnell Heights, Arizona, taken by the writer from July to October, 1929.

***Aligia manitou dellana* Ball, n. var.**

Slightly larger and much darker than typical *manitou* with concolorous males. Resembling *jucunda*, but much smaller. Length, 4.-4.5 mm.

Vertex slightly longer and more definitely angled than in *manitou*. This is accentuated by a dark transverse band back of the ocelli and two definite dark spots on the apex. The elytra are ivory subhyaline with dark nervures as in *jucunda*, without any trace of banding. The males are exactly the same color as the females, while in *manitou* they are an almost uniform golden yellow in sharp contrast.

Holotype, female, Glenn Oaks, October 7. Allotype, male, Granite Dells, October, 6, and ten paratypes taken with the types and at Yarnell Heights, October 8. All taken by the writer in 1929. This may well be a distinct species in the strikingly different males, but if so, then it is probable that a third species is still being confused.

***Aligia turbinata* Ball, n. sp.**

Similar to *manitou* in structure, slightly larger with a sloping vertex. Mahogany with a broad white band, a dark head and apex of elytra. Length, 4-5 mm.

Vertex sloping, one-third longer on middle than against eye. Head very obtusely conical. Elytra flaring, opaque with the venation obscure to the anteapical cells, few transverse veinlets in the anteapicals.

Color: Vertex black, shading out posteriorly. Ocelli white, pronotum, scutellum, and anterior half of elytra rich, shining reddish brown. A broad, opaque, waxy, white transverse band across the second cross nervure. This band narrowly margined with smoky and a heavy smoky band running obliquely from apex of clavus across the three inner apical cells. The anteapical cells and part of the two outer apicals subhyaline with reddish or smoky nervures. Face smoky, the margins black; below pale, the pygofers reddish.

Holotype, female, and allotype, male, Glenn Oaks, Arizona, July 29, 1929, and one male and eleven female paratypes taken with the types and at Yarnell Heights by the writer in July and August.

¹ Types in the collection of the author.

***Aligia chiricana* Ball, n. sp.**

Longer and more slender than *manitou* which it resembles. Elytra delicate milky subhyaline, female, or golden subhyaline, male, with concolorous nervures on basal half. Length, 4.2-5 mm.

Vertex shorter and slightly more conical than in *manitou*, shorter and less conical than in *turbinata*. Elytra longer and less flaring than in *manitou*. Claval nervures without cross nervure, central antepical cell broader but less reticulate, usually four short nervures to costa, while in *manitou* there are three.

Color: Female, vertex creamy with faint traces of the usual markings. Pronotum irregularly marked with wavy brown lines. Scutellum washed with dusty orange, omitting three ivory points at apex. Elytra delicate milky subhyaline with concolorous nervures. Three pairs of black points on clavus, each anterior to a nervure and increasing in size posteriorly. A narrow band across the second cross nervure in which the nervures are smoky or brown, and the membrane ivory. Male golden with the smoky nervures and markings of female, face and below pale creamy.

Holotype, female, allotype, male, and six paratypes, Chiricahua Mountains, Arizona, July 6; also two pairs of paratypes, Huachuca Mountains, Arizona, June 15, all taken in 1930 by the writer. This is a strikingly distinct species with a delicate coloring hard to describe.

***Aligia santana* Ball, n. sp.**

Size and form of *chiricana* nearly, slightly stouter with a more rounding vertex. Smaller and narrower than *modesta* with a broad white band. Length, 4.5-5 mm.

Vertex broad and uniformly rounding, the margins parallel, in *chiricana* and *modesta* the vertex is slightly produced. Elytra, in shape and venation resembling *chiricana*, not as flaring or reticulate, especially along costa, as in *modesta*. Color, pale smoky brown with three pale areas as follows: The vertex, the apex of scutellum and adjacent margins of the claval areas and a broad and definite ivory band across the second cross nervure. There is also a triangular subhyaline area extending in from the first and second apical cells of the elytra. The vertex and face are creamy with the usual pale markings. Three pairs of dark triangles and usually a pair of white dots along the suture. The apical veinlets are fuscous and a smoky cloud occupies the central apical cell.

Holotype, female, Santa Rita Mountains, Arizona, June 22, 1930, allotype, male, the same locality in July and five female paratypes taken by the writer from these mountains June to September. This species approaches *turbinata* in the banded effect, but is easily separated by the triple banding and the short vertex.